

10/551877

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114 Sequence Listing.ST25.txt
SEQUENCE LISTING

<110> Rodríguez Aguirre, José Francisco
González De Llano, Ma Dolores
Oña Blanco, Ana María
Abaitua Elustondo, Fernando
Maraver Molina, Antonio
Clemente Cervera, Roberto
Ruiz Castón, José
Rodríguez Fernández-Alba, Juan Ramón

<120> WHOLE EMPTY VIRAL PARTICLES OF THE INFECTIOUS BURSAL DISEASE VIRUS (IBDV), PRODUCTION PROCESS AND APPLICATIONS

<130> 4258-114

<140> Not yet assigned

<141> 2005-09-30

<150> P200300751

<151> 2003-03-31

<150> PCT/ES2004/000147

<151> 2004-03-31

<160> 9

<170> PatentIn version 3.3

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<212> DNA

<213> Artificial Sequence

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<223> Open reading frame of IBDV polyprotein in reverse complementary strand

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<223> AcMNV polyhedrin promoter

<220>

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<222> (3230)..(3351)

<223> AcMNV p10 promoter

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<221> CDS

<222> (3388)..(6027)

<223> Open reading frame of IBDV VP1 protein

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<221> polyA_site

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30 35 40	
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4902

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4950

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 Leu Met Arg Gln Pro Arg Pro Asp Ser Glu Glu Phe Lys Ser Ile Glu
 510 515 520

4998

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5238

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5286

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5382

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5478

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5526

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 Gly Leu Ser Gly Leu Val Leu Leu Ala Thr Ala Arg Ser Arg Leu Gln
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acggggctcg acgctcagtg gaacgaaaac tcacgttaag ggatttttgt catgagatta	8697
tcaaaaagga tcttcaccta gatccttttta aattaaaaat gaagttttaa atcaatctaa	8757
agtatatatg agtaaacttg gtctgacagt taccaatgct taatcagtga ggcacctatc	8817
tcagcgatct gtctatttcg ttcatccata gttgcctgac tccccgtcgt gtagataact	8877
acgatacggg agggcttacc atctggcccc agtgctgcaa tgataccgcg agacccacgc	8937
tcaccggctc cagatttattc agcaataaac cagccagccg gaagggccga gcgcagaagt	8997
ggtcctgcaa ctttatccgc ctccatccag tctattaatt gttgccggga agctagagta	9057
agtagttcgc cagttaatag tttgcgcaac gttgttgcca ttgctacagg catcgtggtg	9117
tcacgctcgt cgtttggat ggcttcatttc agctccgggtt cccaacgatc aaggcgagtt	9177
acatgatccc ccatgttgtg caaaaaagcg gttagctcct tcggcctcc gatcggttgc	9237
agaagtaagt tggccgcagt gttatcactc atggttatgg cagcactgca taattcttt	9297
actgtcatgc catccgtaag atgctttct gtgactggtg agtactcaac caagtcattc	9357
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aatgcccaa aaaaggaaat aagggcgaca cggaaatgtt gaatactcat actcttcctt	9657
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tgtattttaga aaaataaaaca aataggggtt ccgcgcacat ttccccgaaa agtgcaccc	9777
gaaattgtaa acgttaatat tttgtaaaa ttgcgttaa attttggta aatcagctca	9837
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atagggtga gtgttggtcc agtttggAAC aagagtccac tattaaagaa cgtggactcc	9957
aacgtcaaag ggcggaaaaac cgtctatcag ggcgatggcc cactacgtga accatcaccc	10017
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ccccgattta gagcttgacg gggaaagccg gcgAACGTGG cgagaaagga agggaaagaaa	10137
gcgAAAGGAG CGGGCGCTAG GGCCTGGCA AGTGTAGCGG TCACGCTGCg CGTAACCACC	10197
acacccgccc cgcttaatgc gccgtacag ggcgcgtccc attcgccatt caggctgcaa	10257
ataagcggtt atattcagtc aattacaaac attaataacg aagagatgac agaaaaattt	10317

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tcattctgtg acagagaaaa agtagccgaa gatgacggtt tgtcacatgg agttggcagg	10377
atgtttgatt aaaaacataa caggaagaaa aatccccgc tgtggcgg aaaaatagtt	10437
gggaactggg aggggtggaa atggagttt taaggattat ttaggagaaga gtgacaaaat	10497
agatggAAC tgggtgtgc gtcgtaaGCT aatacgaaaa ttAAAAATGA caaaatAGTT	10557
tggAACTAGA tttCACTTAT ctgggtcggA tctcctAGGC tcaAGCAGTG atcAGATCCA	10617
gacatgataa gatacATTGA tgAGTTGGA caaaccACAA ctAGAATGCA gtgAAAAAAA	10677
tgctttATTt gtgAAATTG TgATGCTATT GCTTTATTG TAACCATTAT AAGCTGCAAT	10737
aaacaAGTTA acaACAACAA ttgcattcat tttatgttC aggttcAGGG ggaggGTGg	10797
gaggTTTTT aaAGCAAGTA aaACCTCTAC aaATGTGGTA tggctgatta tgatcctcta	10857
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<211> 879

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 2

Met Ser Asp Val Phe Asn Ser Pro Gln Ala Arg Ser Thr Ile Ser Ala
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Ala Phe Gly Ile Lys Pro Thr Ala Gly Gln Asp Val Glu Glu Leu Leu
20 25 30

Ile Pro Lys Val Trp Val Pro Pro Glu Asp Pro Leu Ala Ser Pro Ser
35 40 45

Arg Leu Ala Lys Phe Leu Arg Glu Asn Gly Tyr Lys Val Leu Gln Pro
50 55 60

Arg Ser Leu Pro Glu Asn Glu Glu Tyr Glu Thr Asp Gln Ile Leu Pro
65 70 75 80

Asp Leu Ala Trp Met Arg Gln Ile Glu Gly Ala Val Leu Lys Pro Thr
85 90 95

Leu Ser Leu Pro Ile Gly Asp Gln Glu Tyr Phe Pro Lys Tyr Tyr Pro
100 105 110

Thr His Arg Pro Ser Lys Glu Lys Pro Asn Ala Tyr Pro Pro Asp Ile
115 120 125

114 Sequence Listing.ST25.txt

Ala Leu Leu Lys Gln Met Ile Tyr Leu Phe Leu Gln Val Pro Glu Ala
130 135 140

Asn Glu Gly Leu Lys Asp Glu Val Thr Leu Leu Thr Gln Asn Ile Arg
145 150 155 160

Asp Lys Ala Tyr Gly Ser Gly Thr Tyr Met Gly Gln Ala Asn Arg Leu
165 170 175

Val Ala Met Lys Glu Val Ala Thr Gly Arg Asn Pro Asn Lys Asp Pro
180 185 190

Leu Lys Leu Gly Tyr Thr Phe Glu Ser Ile Ala Gln Leu Leu Asp Ile
195 200 205

Thr Leu Pro Val Gly Pro Pro Gly Glu Asp Asp Lys Pro Trp Val Pro
210 215 220

Leu Thr Arg Val Pro Ser Arg Met Leu Val Leu Thr Gly Asp Val Asp
225 230 235 240

Gly Asp Phe Glu Val Glu Asp Tyr Leu Pro Lys Ile Asn Leu Lys Ser
245 250 255

Ser Ser Gly Leu Pro Tyr Val Gly Arg Thr Lys Gly Glu Thr Ile Gly
260 265 270

Glu Met Ile Ala Ile Ser Asn Gln Phe Leu Arg Glu Leu Ser Thr Leu
275 280 285

Leu Lys Gln Gly Ala Gly Thr Lys Gly Ser Asn Lys Lys Lys Leu Leu
290 295 300

Ser Met Leu Ser Asp Tyr Trp Tyr Leu Ser Cys Gly Leu Leu Phe Pro
305 310 315 320

Lys Ala Glu Arg Tyr Asp Lys Ser Thr Trp Leu Thr Lys Thr Arg Asn
325 330 335

Ile Trp Ser Ala Pro Ser Pro Thr His Leu Met Ile Ser Met Ile Thr
340 345 350

Trp Pro Val Met Ser Asn Ser Pro Asn Asn Val Leu Asn Ile Glu Gly
355 360 365

Cys Pro Ser Leu Tyr Lys Phe Asn Pro Phe Arg Gly Gly Leu Asn Arg
370 375 380

114 Sequence Listing.ST25.txt

Ile Val Glu Trp Ile Leu Ala Pro Glu Glu Pro Lys Ala Leu Val Tyr
385 390 395 400

Ala Asp Asn Ile Tyr Ile Val His Ser Asn Thr Trp Tyr Ser Ile Asp
405 410 415

Leu Glu Lys Gly Glu Ala Asn Cys Thr Arg Gln His Met Gln Ala Ala
420 425 430

Met Tyr Tyr Ile Leu Thr Arg Gly Trp Ser Asp Asn Gly Asp Pro Met
435 440 445

Phe Asn Gln Thr Trp Ala Thr Phe Ala Met Asn Ile Ala Pro Ala Leu
450 455 460

Val Val Asp Ser Ser Cys Leu Ile Met Asn Leu Gln Ile Lys Thr Tyr
465 470 475 480

Gly Gln Gly Ser Gly Asn Ala Ala Thr Phe Ile Asn Asn His Leu Leu
485 490 495

Ser Thr Leu Val Leu Asp Gln Trp Asn Leu Met Arg Gln Pro Arg Pro
500 505 510

Asp Ser Glu Glu Phe Lys Ser Ile Glu Asp Lys Leu Gly Ile Asn Phe
515 520 525

Lys Ile Glu Arg Ser Ile Asp Asp Ile Arg Gly Lys Leu Arg Gln Leu
530 535 540

Val Leu Leu Ala Gln Pro Gly Tyr Leu Ser Gly Gly Val Glu Pro Glu
545 550 555 560

Gln Ser Ser Pro Thr Val Glu Leu Asp Leu Leu Gly Trp Ser Ala Thr
565 570 575

Tyr Ser Lys Asp Leu Gly Ile Tyr Val Pro Val Leu Asp Lys Glu Arg
580 585 590

Leu Phe Cys Ser Ala Ala Tyr Pro Lys Gly Val Glu Asn Lys Ser Leu
595 600 605

Lys Ser Lys Val Gly Ile Glu Gln Ala Tyr Lys Val Val Arg Tyr Glu
610 615 620

Ala Leu Arg Leu Val Gly Gly Trp Asn Tyr Pro Leu Leu Asn Lys Ala
625 630 635 640

114 Sequence Listing.ST25.txt

Cys Lys Asn Asn Ala Gly Ala Ala Arg Arg His Leu Glu Ala Lys Gly
645 650 655

Phe Pro Leu Asp Glu Phe Leu Ala Glu Trp Ser Glu Leu Ser Glu Phe
660 665 670

Gly Glu Ala Phe Glu Gly Phe Asn Ile Lys Leu Thr Val Thr Ser Glu
675 680 685

Ser Leu Ala Glu Leu Asn Lys Pro Val Pro Pro Lys Pro Pro Asn Val
690 695 700

Asn Arg Pro Val Asn Thr Gly Gly Leu Lys Ala Val Ser Asn Ala Leu
705 710 715 720

Lys Thr Gly Arg Tyr Arg Asn Glu Ala Gly Leu Ser Gly Leu Val Leu
725 730 735

Leu Ala Thr Ala Arg Ser Arg Leu Gln Asp Ala Val Lys Ala Lys Ala
740 745 750

Glu Ala Glu Lys Leu His Lys Ser Lys Pro Asp Asp Pro Asp Ala Asp
755 760 765

Trp Phe Glu Arg Ser Glu Thr Leu Ser Asp Leu Leu Glu Lys Ala Asp
770 775 780

Ile Ala Ser Lys Val Ala His Ser Ala Leu Val Glu Thr Ser Asp Ala
785 790 795 800

Leu Glu Ala Val Gln Ser Thr Ser Val Tyr Thr Pro Lys Tyr Pro Glu
805 810 815

Val Lys Asn Pro Gln Thr Ala Ser Asn Pro Val Val Gly Leu His Leu
820 825 830

Pro Ala Lys Arg Ala Thr Gly Val Gln Ala Ala Leu Leu Gly Ala Gly
835 840 845

Thr Ser Arg Pro Met Gly Met Glu Ala Pro Thr Arg Ser Lys Asn Ala
850 855 860

Val Lys Met Ala Lys Arg Arg Gln Arg Gln Lys Glu Ser Arg Gln
865 870 875

114 Sequence Listing.ST25.txt

<211> 13
<212> PRT
<213> Infectious bursal disease virus

<400> 3

Gly Arg Trp Ile Arg Thr Val Ser Asp Glu Asp Leu Glu
1 5 10

<210> 4
<211> 37
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 4
gggggaattc atggcatcag agttcaaaga gacccccc 37

<210> 5
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 5
cgcgggtacc ttaccagcgg cccagccgac c 31

<210> 6
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 6
cgcgggtacc ttaaccaggg ggtctctgtg ttg 33

<210> 7
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 7
cgcgggtacc ttatgttggaa gcattgggtt ttg 33

<210> 8
<211> 31
<212> DNA
<213> Artificial Sequence

114 Sequence Listing.ST25.txt

<220>
<223> Synthetic Construct

<400> 8
cgcgggtacc ttattttggc ttgggcttg g 31

<210> 9
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Construct

<400> 9
cgcgggtacc ttatggtaga gcccgccctgg g 31